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AN - 1994-089460 [11]

XA - C1994-041198

XP - N1994-070073

TI - Non-aq. resin dispersion for liq. developing agent - comprises tangled chain polymer prep'd. by polymerising vinyl monomer in solvent contg. dispersed polyester resin

DC - A14 A23 A82 G02 G08 P84

PA - (DNIN) DAINIPPON INK & CHEM KK

NP - 1

NC - 1

PN - **JP06041402** A 19940215 DW1994-11 C08L-067/00 6p \*

AP: 1992JP-0212737 19920810

PR - 1992JP-0130718 19920522

IC - C08L-002/44 C08L-051/08 C08L-067/02 G03G-009/13 C08F-283/02 C09D-005/00

AB - JP06041402 A

Dispersion comprises a tangled chain polymer dispersed in a non-aq. solvent which does not dissolve the polymer. The polymer is prep'd. by polymerising vinyl monomer mixt. forming a polymer which is insol. in the non-aq. solvent, in non-aq. solvent contg. polyester resin. The polyester resin is prep'd. by condensing a polybasic acid and a polyhydric alcohol which are soluble in the non-aq. solvent. In the tangled chain polymer, the vinyl copolymer and the polyester resin are entangled with each other.

Pref. the vinyl monomers are, e.g. methyl (meth)acrylate, (meth)acryloxyethyl phosphate, glycidyl (meth)acrylate or vinyl toluene. The ratio of the polyester resin to the vinyl monomers is 10-900 by wt..

USE/ADVANTAGE - The resin dispersion is used as a fixing agent of a liq. developing agent for developing electrostatic latent images, paint, etc.. The dispersion has good dispersion stability.

In an example, 0.5 mol ethylene glycol, 0.5 mol dodecanol, 0.5 mol adipic acid, 0.6 mol dodecanoic diacid and dibutyl tin oxide were condensed at 220 deg.C for 15 hrs. to obtain soluble polyester resin (A1) having an acid value of 15. A 60 pts. wt. polyester resin (A1), 30 pts. wt. vinyl acetate, 10 pts. wt. N-vinyl-2-pyrrolidone, 0.8 pts. wt. azobisisobutyronitrile and 150 pts. wt. 'Isobar G' were reacted at 80 deg.C for 10 hrs. to obtain a tangled chain polymer (A2) which contained 39.7% non-volatile components and was insol. in non-aq. solvent. A mixt. of 100 pts. wt. polymer (A2), 38 pts. wt. C black, 2 pts. wt. Co naphthenate and 660 pts. wt. 'Isobar-G' (RTM) was kneaded for 8 hrs. and diluted with 7200 pts. wt. 'Isobar-G' to obtain a liq. developing agent having 1% non-volatile content. The developing agent did not produce deposits after storing for 1 month. (Dwg.0/0)

MC - CPI: A05-E01D A07-A04D A10-B04 A12-L05C2 A12-S G06-G06

UP - 1994-11